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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/701,201	11/27/2000	George Friedman	1235-00	7397

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EXAMINER	
JACKSON, JENISE E	

ART UNIT	PAPER NUMBER
2131	

DATE MAILED: 07/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/701,201	FRIEDMAN ET AL.	
	Examiner	Art Unit	
	Jenise E Jackson	2131	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-32 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-8,16-23,31 and 32 is/are rejected.

7)☒ Claim(s) 9-15 and 24-30 is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 5.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-8, 16-23, 31-32 rejected under 35 U.S.C. 102(b) as being anticipated by Cabrera(5,978, 815).

3. As per claims 1, 31-32, Cabrera et al. discloses a method for providing data security in a first device driver operably installed in a computer operating system having a layered plurality of device drivers for accessing data in a data storage device(see col. 3, lines 15-23, 52-56, col. 7, lines 33-43), detecting an I/O request to said first device driver(see col. 7, lines 33-42, col. 16, lines 12-53); determining whether said first device driver is functionally uppermost in the layered plurality of device drivers(see col. 16, lines 12-22); if said first device driver is functionally uppermost in the layered plurality of device drivers, performing the I/0 request in said first device driver(see col. 7, lines 33-63); and if said first device driver is not functionally uppermost in the layered plurality of device drivers, denying the I/O request in said first device driver, and allowing the I/O request to be performed by a next lower-level device driver in the layered plurality of device drivers(see col. 7, lines 33-63).

4. As per claim 2, Cabrera et al. discloses wherein said first device driver is a file system monitor(see col. 4, lines 21-65).

5. As per claim 3, Cabrera et al. discloses wherein the data is stored in a secure virtual

file system, and wherein the step of performing the I/0 request includes the step of implementing data security measures(see col. 20, lines 12-27).

6. As per claim 4, Cabrera et al. discloses wherein the data is stored in encrypted form, and wherein the step of performing the I/O request further comprises the step of decrypting the data(see col. 25, lines 30-51, col. 26, lines 7-25).

7. As per claim 5, Cabrera et al. discloses wherein the step of performing the I/0 request further comprises the step of checking the data for viruses(see col. 9, lines 9-51).

8. As per claim 6, Cabrera et al. discloses wherein the step of determining whether said first device driver is functionally uppermost in the layered plurality of device drivers further comprises the steps of determining whether said first device driver has been previously called; if said first device driver has not been previously called(see col. 3, lines 52-67, col. 4, lines 1-20), detecting an initial calling module address, storing said initial calling module address, and concluding that said first device driver is functionally uppermost in the layered plurality of device drivers(see col. 6, lines 53-67, col. 7, lines 1-4, 33-42); if said first device driver has been previously called, detecting a second calling module address, comparing said second calling module address to the initial calling module address, and concluding that said first device driver is functionally uppermost in the layered plurality of device drivers only if the initial calling module address matches the second calling module address(see col. 17, lines 10-67).

9. As per claim 7, Cabrera discloses wherein the step of denying the I/O request in the secure first device driver comprises the steps of is setting a first device driver shutdown flag; and initiating a re-hook process(see col. 6, lines 53-67, col. 7, lines 1-4) .

10. As per claim 8, Cabrera discloses after the step of detecting an 1/O request to said

first device driver, the checking whether a first device driver shutdown flag is set; and if said first device driver shutdown flag is set, omitting further steps in said first device driver, and allowing the 1/O request to be performed by a next lower-level device driver in the layered plurality of device drivers(see col. 7, lines 5-42).

11. As per claim 16, it is rejected under the same basis as claim 1.

12. As per claim 17, it is rejected under the same basis as claim 2.

13. As per claim 18, it is rejected under the same basis as claim 3.

14. As per claim 19, it is rejected under the same basis as claim 4.

15. As per claim 20, it is rejected under the same basis as claim 5.

16. As per claim 21, it is rejected under the same basis as claim 6.

17. As per claim 22, Cabrera discloses a first device driver shutdown flag and a re-hook system, wherein said first device driver denies the I/O request by setting a first device driver shutdown flag and calling the re-hook system(see col. 6, lines 53-67, col. 7, lines 1-4) .

18. As per claim 23, it is rejected under the same basis as claim 8.

19. Claims 9-15, 24-30 are objected to as being rejected on base claims, these claims are allowable for wherein the step of initiating a re-hook process includes the steps of counting the number of times the re-hook process has been initiated checking whether the number of times has reached a predetermined maximum threshold; if the number of times has reached a predetermined maximum threshold, initiating a programmable security response; if the number of times has not reached a predetermined maximum threshold, initiating reattachment of said first device driver functionally uppermost in the layered plurality of device drivers; if said first device driver has been reattached functionally uppermost in the layered plurality of device

drivers, unsetting said first device driver shutdown flag; and concluding the re-hook process. An example of prior art that does not disclose this is Jones, Jones discloses a plurality of driver layers, that when a host request is received, the first layer device driver executing on the controller determines if the request is atomic.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jenise E Jackson whose telephone number is (703) 306-0426. The examiner can normally be reached on M-Th (6:00 a.m. - 3:30 p.m.) alternate Friday's.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Shiekh can be reached on (703) 305-9648. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

July 9, 2004

AYAZ SHEIKH
SUPERVISORY PATENT EXAMINER
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